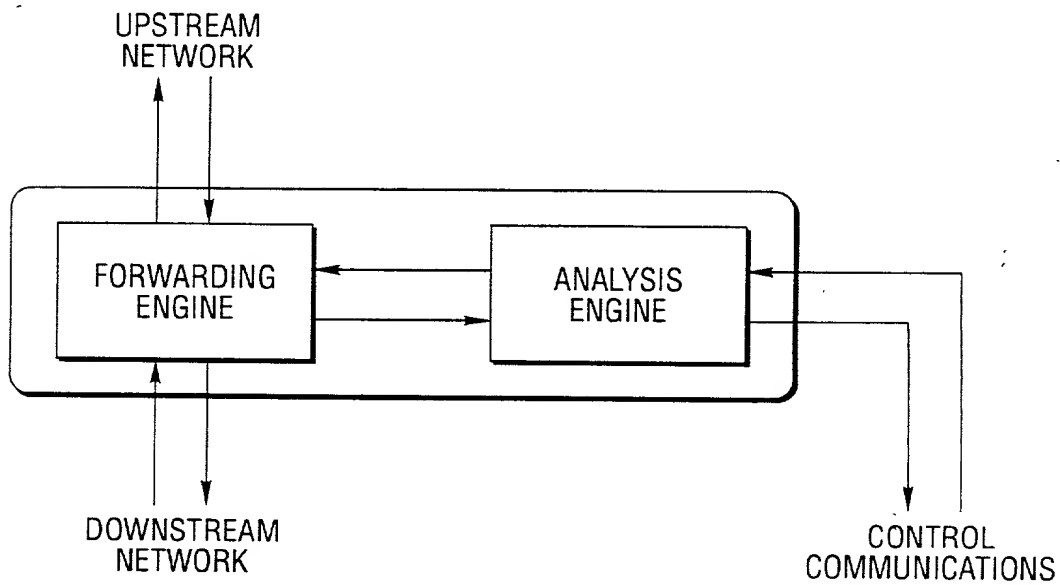
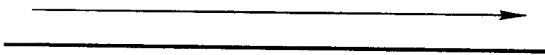


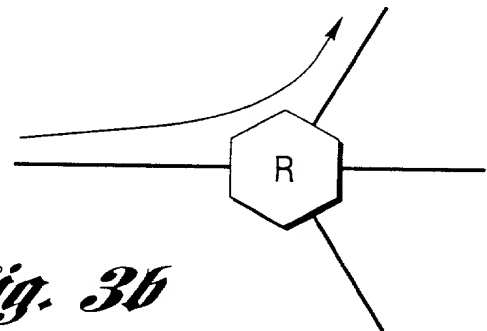
*Fig. 1*



*Fig. 2*

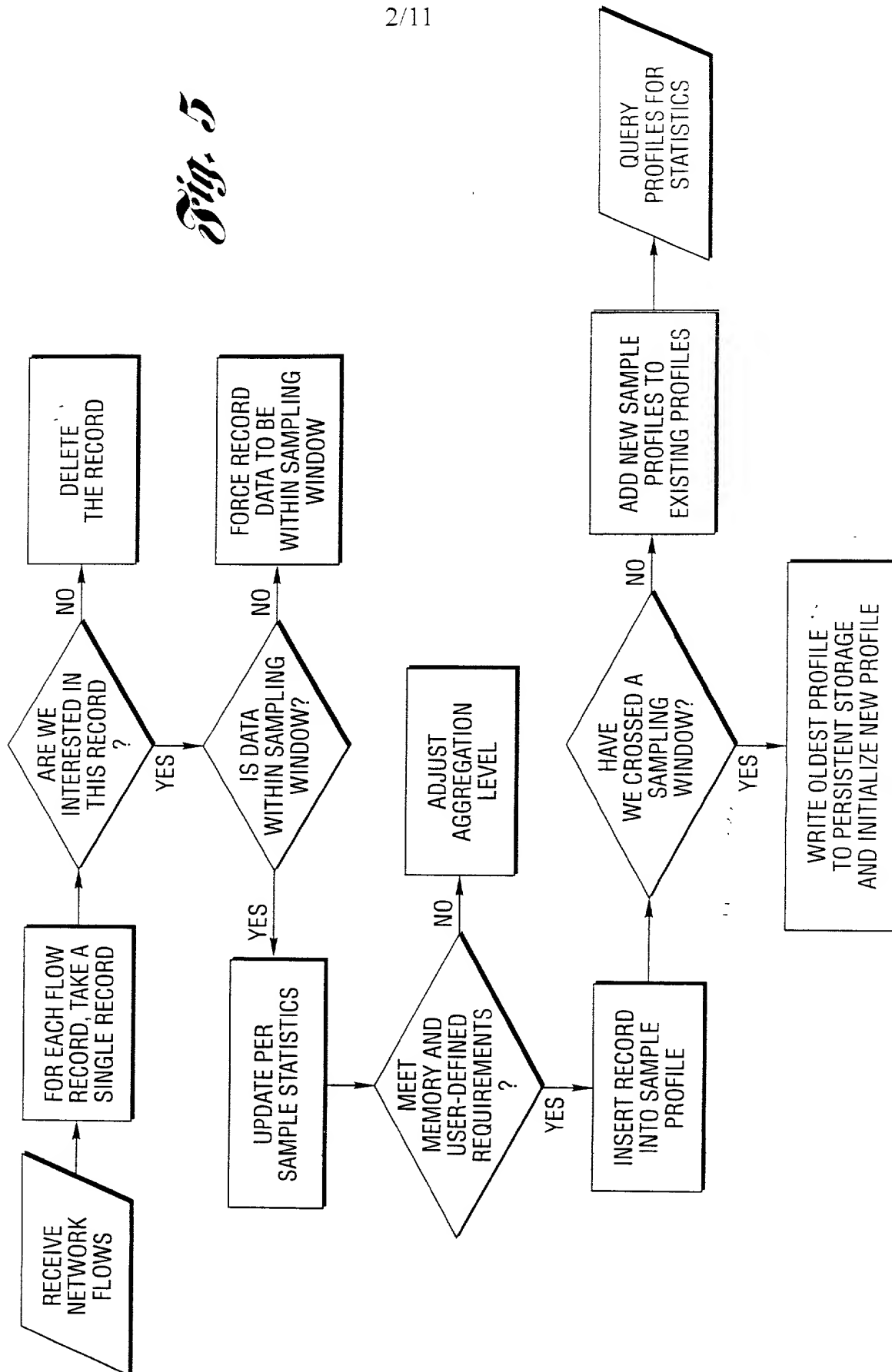


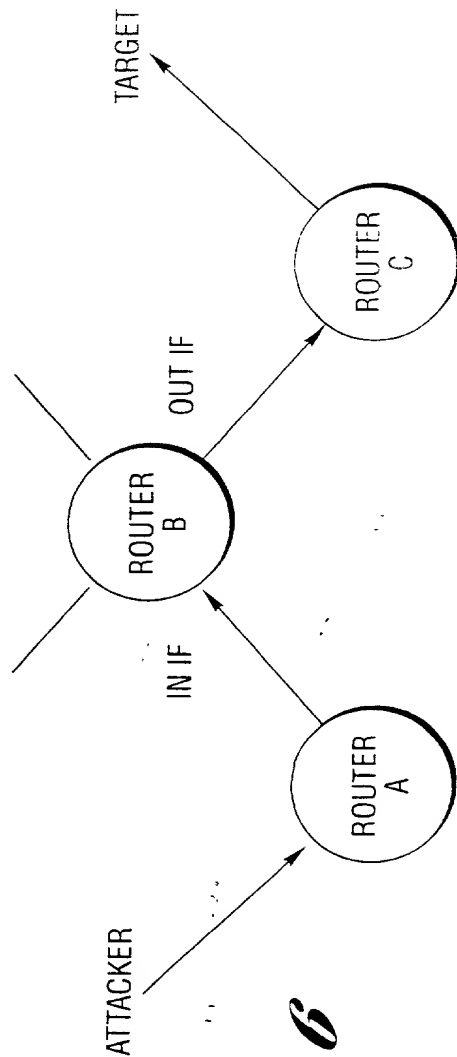
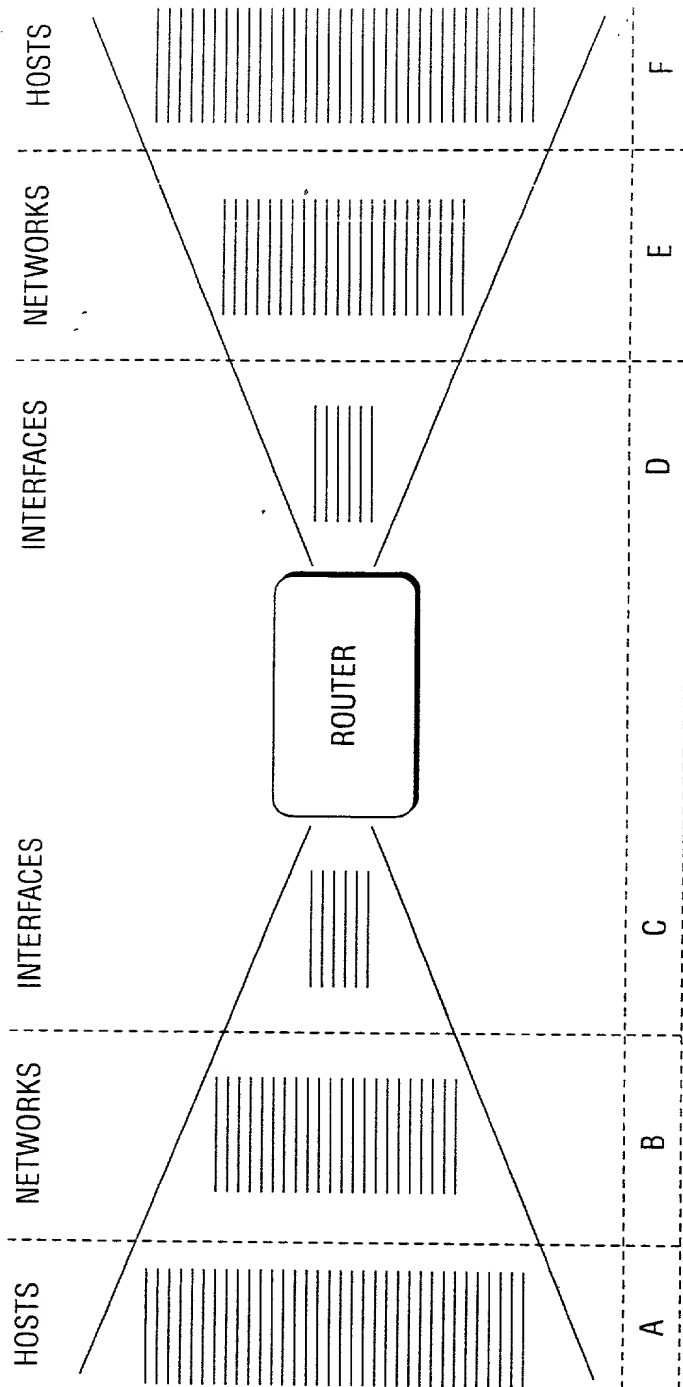
*Fig. 3a*



*Fig. 3b*

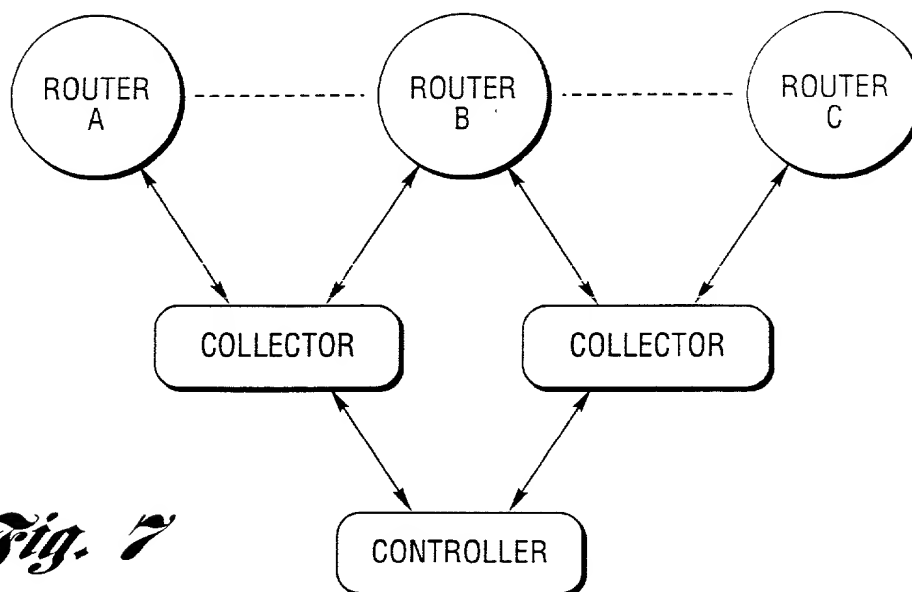
*Fig. 5*



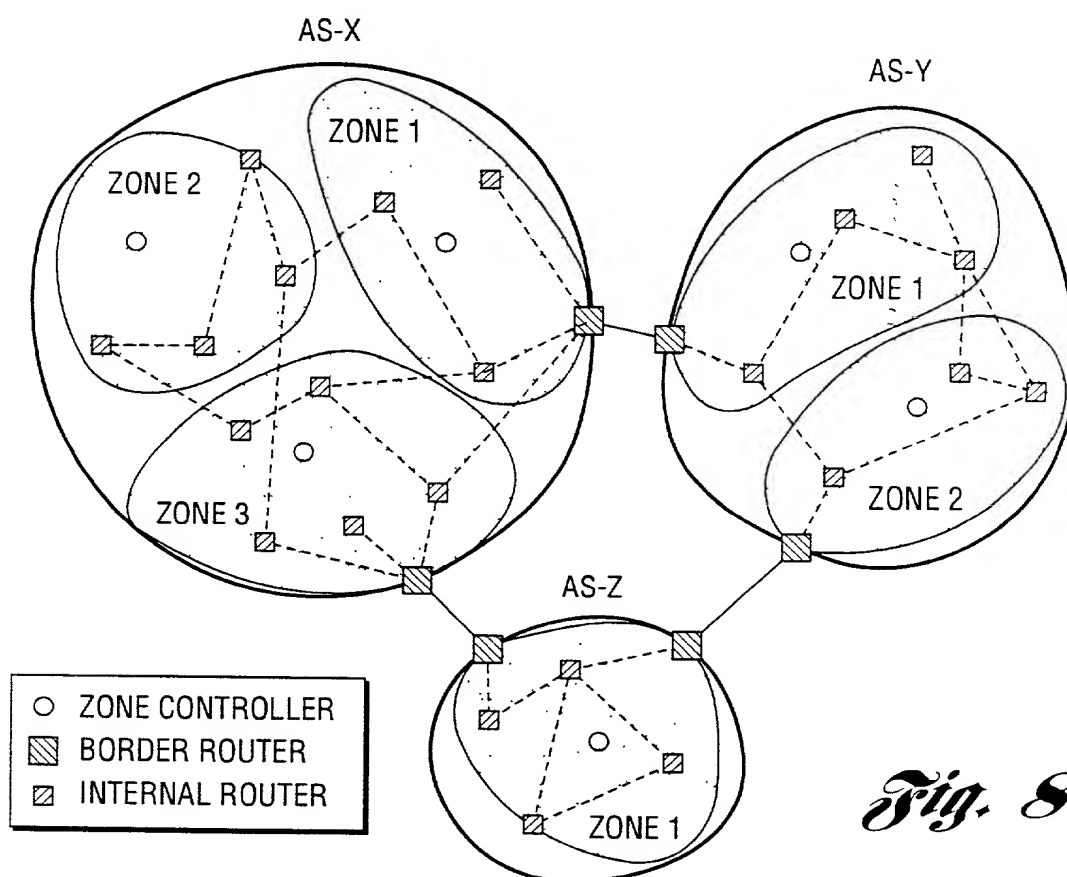


*Fig. 4*

*Fig. 6*



*Fig. 7*



*Fig. 8*

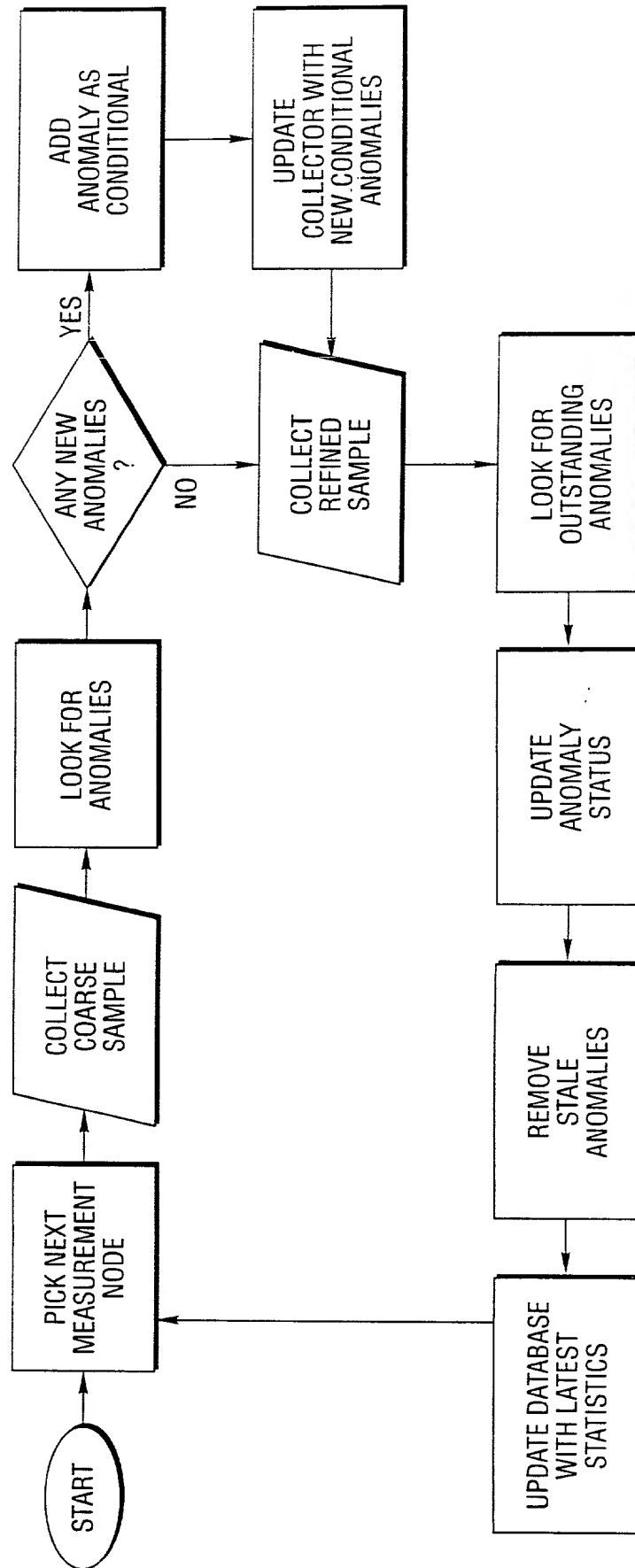
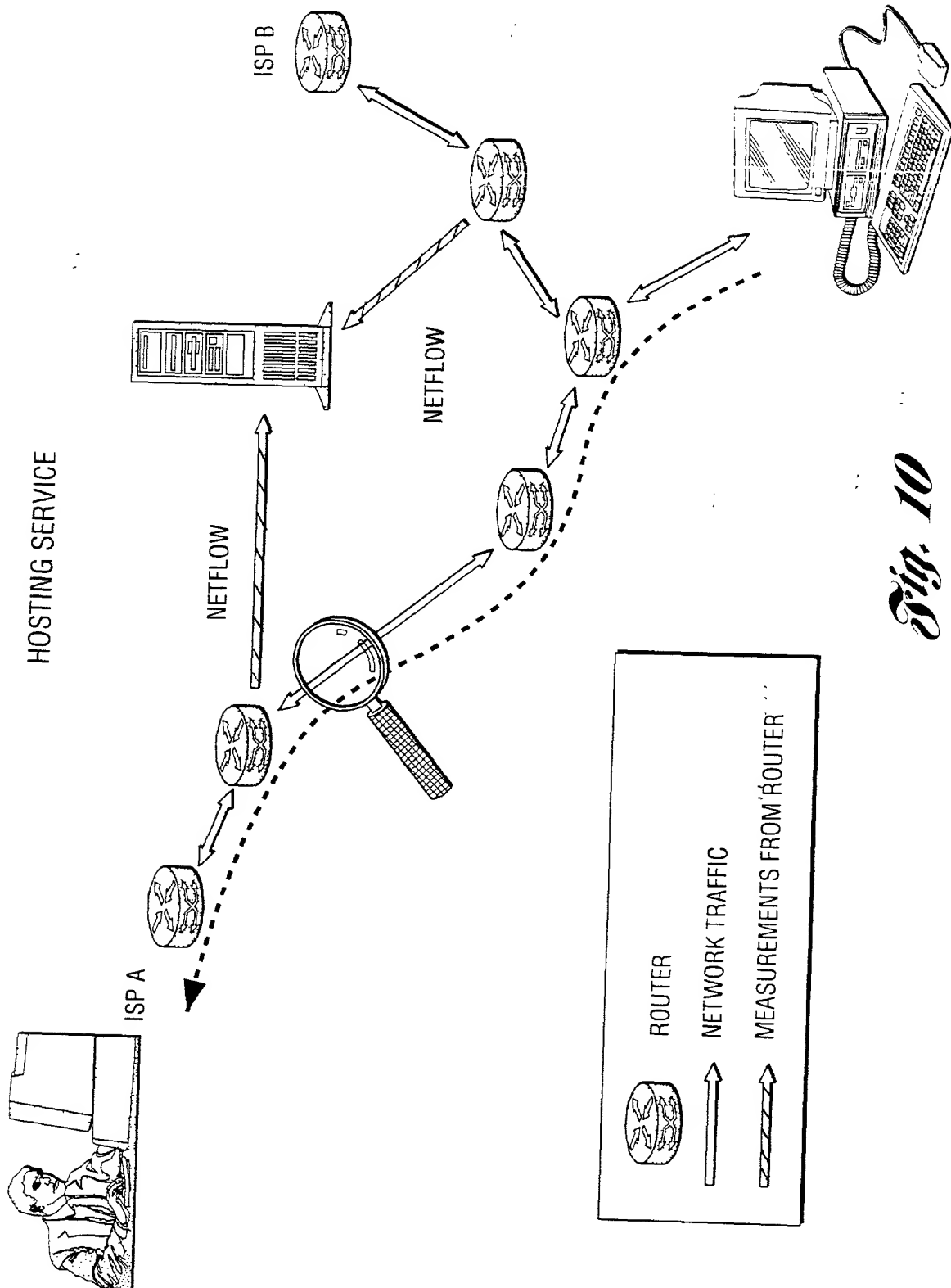
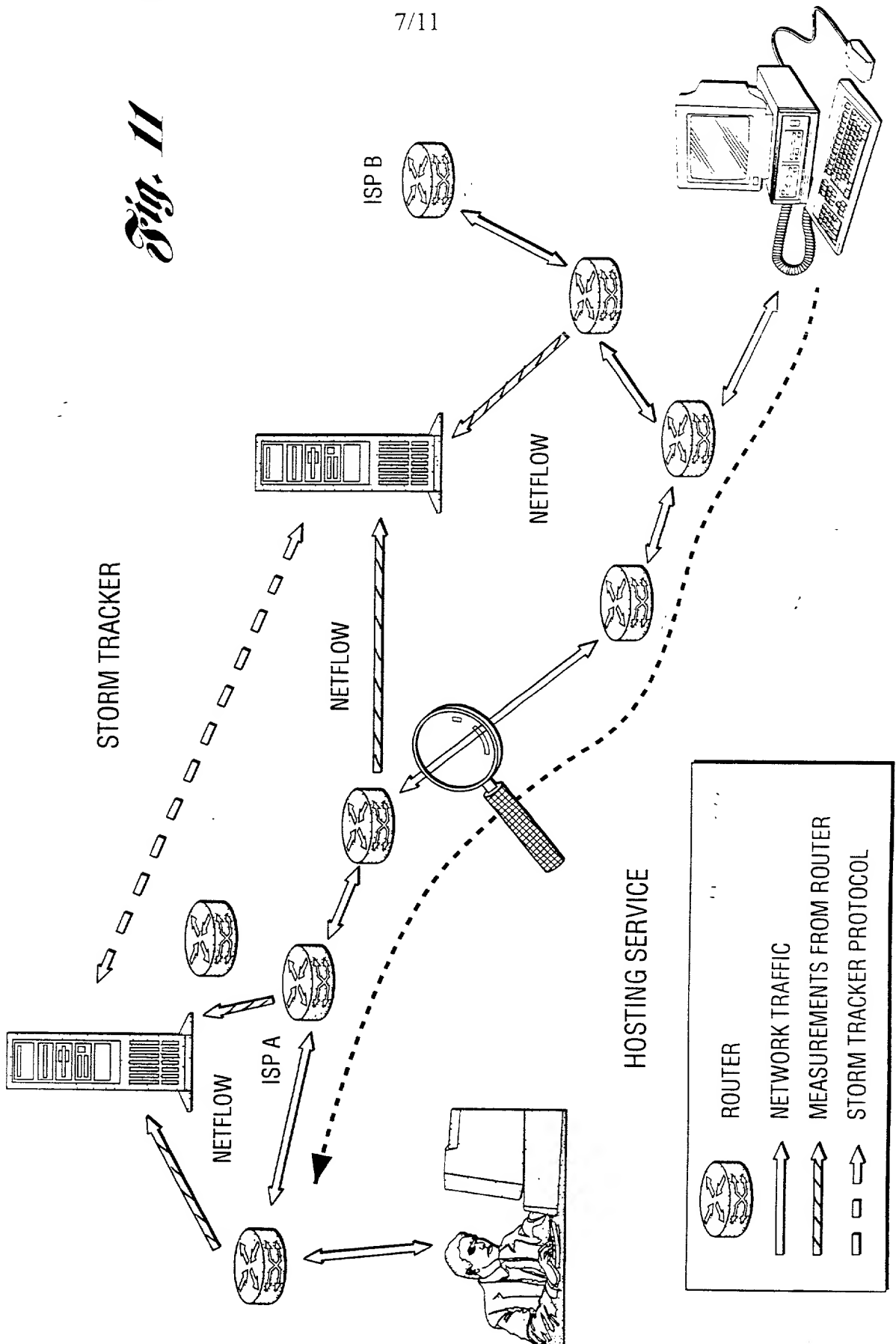


Fig. 9



7/11

*Fig. 11*



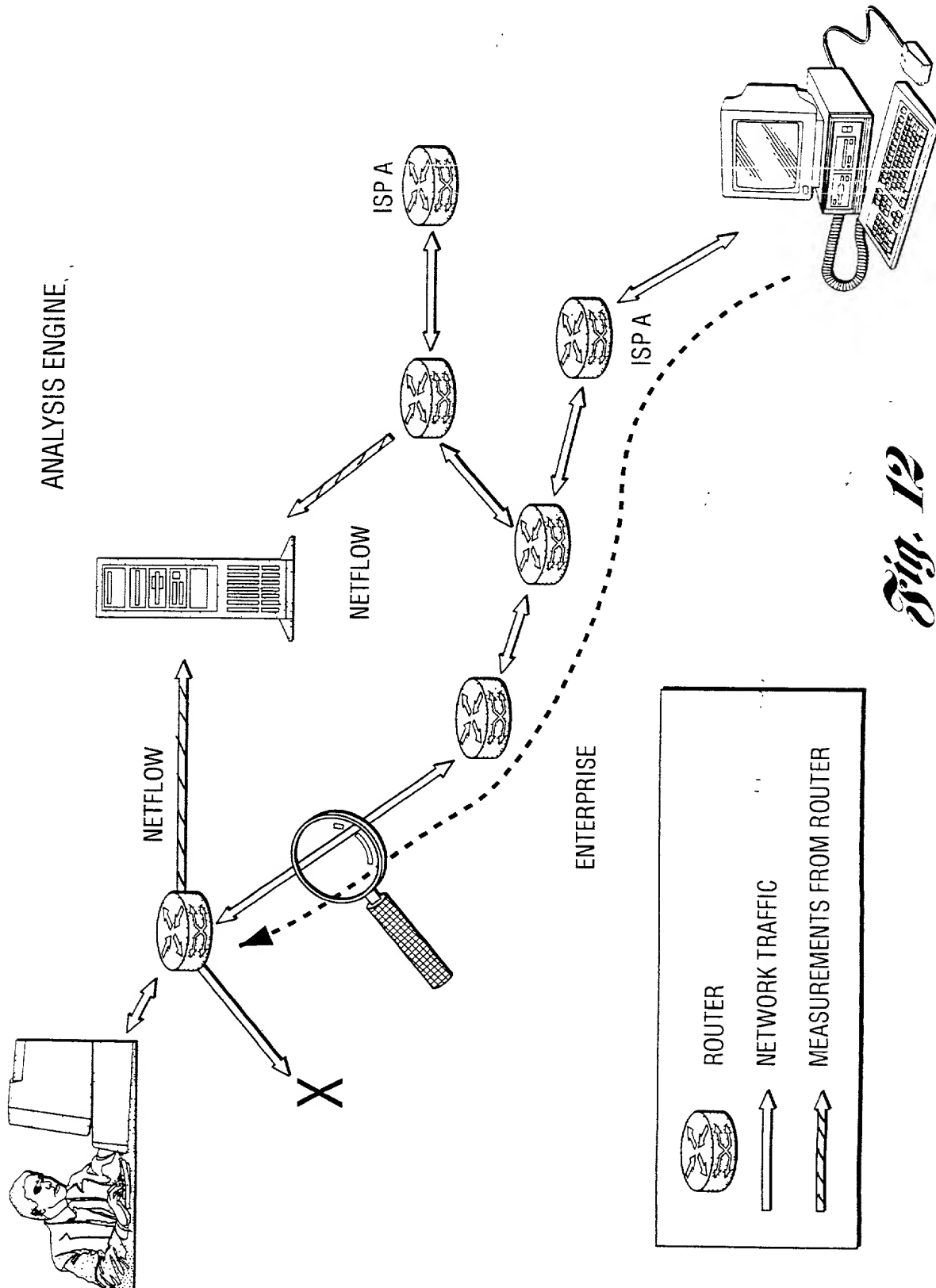


Fig. 12



9/11

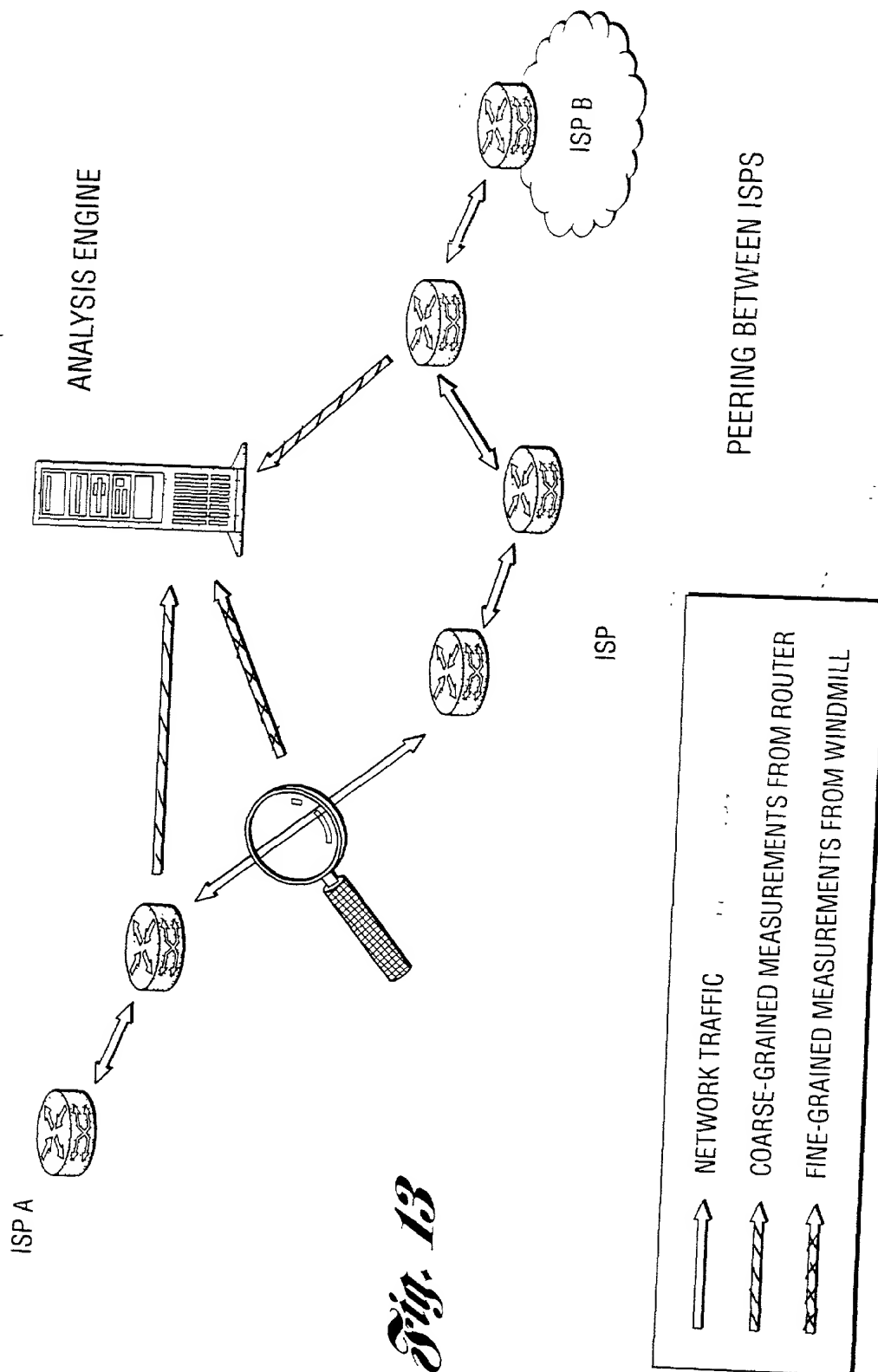
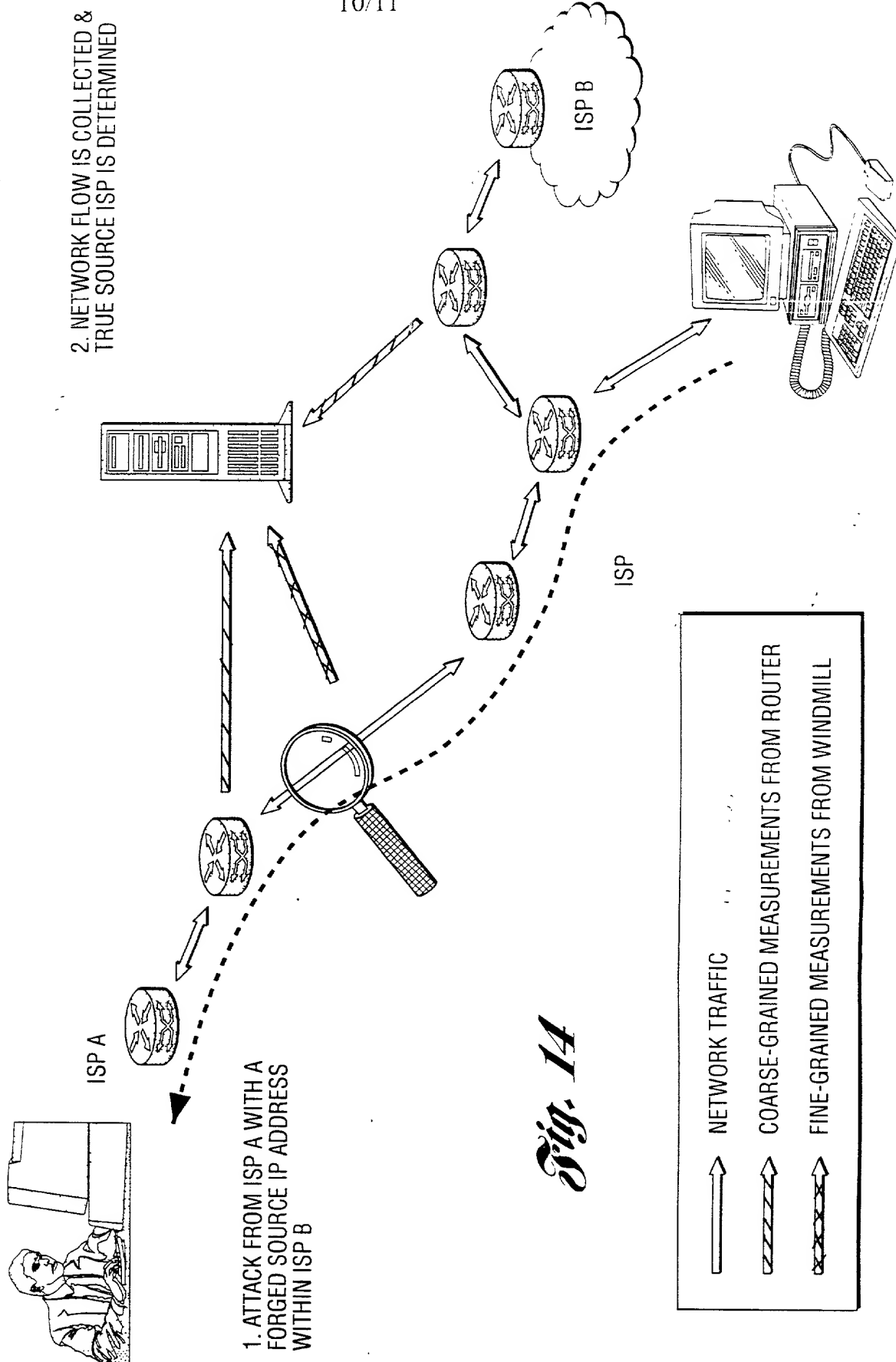


Fig. 13

10/11



11/11

*Fig. 15*

1. ATTACK FROM ISP A WITH A FORGED SOURCE IP ADDRESS WITHIN ISP B

ISP A

ANALYSIS ENGINE

ISP B

ISP

2. DOS ATTACK IS TRACED BACK TO UPSTREAM ROUTERS; THE FLOW IS BLOCKED AS CLOSE AS POSSIBLE TO THE NETWORK

NETWORK TRAFFIC

COARSE-GRAINED MEASUREMENTS FROM ROUTER

FINE-GRAINED MEASUREMENTS FROM WINDMILL

